Introduction: How to recover from an aborted/faulted out tool change.

Required Tools: 12mm wrench or socket & wrench, Ladder, 2nd person.

Procedure:

1. If there is a tool in the spindle, press the tool release button on the head of the machine and hold it, then jog the z-axis up off the tool as far as it will go.

2. Get a ladder and climb up on the backside of the machine where the tool carousel is and locate the swing arm motor. There will be a brake release lever on the side of it, switch it to the right to release the motor brake.

3. Place a 12mm wrench or socket on the nut sticking out the top of the swing arm motor and move in a CW direction to move the arm away from the tool holders. You will need a second person to remove the tool from the spindle when the arm drops down and releases the lock tabs that hold the tool in the arm. Then they can let you know when the arm is far enough away from the spindle and the tool pot.

4. Cycle estop to clear any alarms now press and hold the Aux12 key (solid blue button on the jog panel furthest away from the mist button) then press F3-MDI and issue an M14 to move the pot back up out of the way.

5. At this point there should be no tool in the spindle and the pot should be back up in the carousel. Climb back up the ladder and switch the brake lever back to the left to re-engage the swing arm.
motor brake.
6. Again press and hold the Aux12 key, go back into MDI and issue M13 twice to put the arm back to its neutral position.
7. You can now address the reason for aborting the tool change or fix the cause of the fault that stopped the tool change from completing.

Document History

Rev2 Created on 2011-06-06 by #240
Rev1 Created on 2010-07-12 by #240